

uomcore

1652

#10
worn

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/147,947ADATE: 02/01/2000
TIME: 14:05:12

Input Set: I147947A.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

```
1 <110> APPLICANT: TSURUOKA, Nobuo
2   YAMASHIRO, Kyoko
3   YAMAGUCHI, Nozomi
4 <120> TITLE OF INVENTION: Novel Serine Protease
5 <130> FILE REFERENCE: 001560-349
6 <140> CURRENT APPLICATION NUMBER: US/09/147,947A
7 <141> CURRENT FILING DATE: 1997-03-24
8 <150> EARLIER APPLICATION NUMBER: PCT/JP98/03324
9 <151> EARLIER FILING DATE: 1998-07-24
10 <150> EARLIER APPLICATION NUMBER: JP 9/213969
11 <151> EARLIER FILING DATE: 1997-07-24
12 <160> NUMBER OF SEQ ID NOS: 6
13 <170> SOFTWARE: PatentIn Ver. 2.0
14 <210> SEQ ID NO 1
15 <211> LENGTH: 20
16 <212> TYPE: DNA
17 <213> ORGANISM: Artificial Sequence
18 <220> FEATURE:
19 <223> OTHER INFORMATION: Description of Artificial Sequence:Synthetic DNA
20 <220> FEATURE:
21 <221> NAME/KEY: misc_feature
22 <222> LOCATION: (9)..(12)
23 <223> OTHER INFORMATION: Nucleotides 9 and 12 are n wherein n = any
24   nucleotide.
25 <400> SEQUENCE: 1
26   gtgctcacng cngcbcaytg
27 <210> SEQ ID NO 2
28 <211> LENGTH: 20
29 <212> TYPE: DNA
30 <213> ORGANISM: Artificial Sequence
31 <220> FEATURE:
32 <223> OTHER INFORMATION: Description of Artificial Sequence:Synthetic DNA
33 <220> FEATURE:
34 <221> NAME/KEY: misc_feature
35 <222> LOCATION: (6)..(9)
36 <223> OTHER INFORMATION: Nucleotides 6 and 9 are n wherein n = any
37   nucleotide.
38 <400> SEQUENCE: 2
39   agcgggncnc cdgartcvcc
40 <210> SEQ ID NO 3
41 <211> LENGTH: 2614
42 <212> TYPE: DNA
43 <213> ORGANISM: Mouse
44 <220> FEATURE:
```

W--> OK

20

W--> OK

20

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/147,947A

DATE: 02/01/2000
TIME: 14:05:12

Input Set: I147947A.RAW

45 <223> OTHER INFORMATION:

46 <400> SEQUENCE: 3

```

47      cgaggggtggg gtggaggtcg gactccgggc tacagagctc ctggcgctca tcgcctctgg      60
48      ctccagcctt tgcttcgcgg ggctgaccct ttgggtcccg gtgtgacctt ccagctgccc      120
49      cgggggctgg gacagcaggg cggcggcgcg agcgtgggag ggggctctag gactctgccc      180
50      gccccgcccc gccccctccg cggggacccg gagcccagca tggaccacac tcggcgccgc      240
51      agcc atg gcg ctc gcc cgc tgc gtg ctg gct gtg att tta ggg gca ctg      289
52      Met Ala Leu Ala Arg Cys Val Leu Ala Val Ile Leu Gly Ala Leu
53      1          5          10          15
54      tct gta gtg gcc cgc gct gat ccg gtc tcg cgc tct ccc ctt cac cgc      337
55      Ser Val Val Ala Arg Ala Asp Pro Val Ser Arg Ser Pro Leu His Arg
56      20          25          30
57      ccg cat ccg tcc cca ccg cgt tcc caa cac gcg cac tac ctt ccc agc      385
58      Pro His Pro Ser Pro Pro Arg Ser Gln His Ala His Tyr Leu Pro Ser
59      35          40          45
60      tcg cgg cgg cca ccc agg acc ccg cgc ttc ccg ctc ccg ctg cgg atc      433
61      Ser Arg Arg Pro Pro Arg Thr Pro Arg Phe Pro Leu Pro Leu Arg Ile
62      50          55          60
63      ccc gct gcc cag cgc ccg cag gtc ctc agc acc ggg cac acg ccc ccg      481
64      Pro Ala Ala Gln Arg Pro Gln Val Leu Ser Thr Gly His Thr Pro Pro
65      65          70          75
66      acg att cca cgc cgc tgc ggg gca gga gag tcg tgg ggc aat gcc acc      529
67      Thr Ile Pro Arg Arg Cys Gly Ala Gly Glu Ser Trp Gly Asn Ala Thr
68      80          85          90          95
69      aac ctc ggc gtc ccg tgt cta cac tgg gac gag gtg ccg ccc ttc ctg      577
70      Asn Leu Gly Val Pro Cys Leu His Trp Asp Glu Val Pro Pro Phe Leu
71      100          105          110
72      gag cgg tcg ccc ccg gcc agt tgg gct gag ctg cga ggg cag ccg cac      625
73      Glu Arg Ser Pro Pro Ala Ser Trp Ala Glu Leu Arg Gly Gln Pro His
74      115          120          125
75      aac ttc tgc cgg agc ccg gat ggc tcg ggc aga cct tgg tgc ttc tat      673
76      Asn Phe Cys Arg Ser Pro Asp Gly Ser Gly Arg Pro Trp Cys Phe Tyr
77      130          135          140
78      cgg aat gcc cag ggc aaa gta gac tgg ggc tac tgc gat tgt ggt caa      721
79      Arg Asn Ala Gln Gly Lys Val Asp Trp Gly Tyr Cys Asp Cys Gly Gln
80      145          150          155
81      ggc ccg gcg ttg ccc gtc att cgc ctt gtt ggt ggg aac agt ggg cat      769
82      Gly Pro Ala Leu Pro Val Ile Arg Leu Val Gly Gly Asn Ser Gly His
83      160          165          170          175
84      gaa ggt cga gtg gag ctg tac cac gct ggc cag tgg ggg acc atc tgt      817
85      Glu Gly Arg Val Glu Leu Tyr His Ala Gly Gln Trp Gly Thr Ile Cys
86      180          185          190
87      gac gac caa tgg gac aat gca gac gca gac gtc atc tgt agg cag ctg      865
88      Asp Asp Gln Trp Asp Asn Ala Asp Ala Asp Val Ile Cys Arg Gln Leu
89      195          200          205
90      ggg ctc agt ggc att gcc aaa gca tgg cat cag gca cat ttt ggg gaa      913
91      Gly Leu Ser Gly Ile Ala Lys Ala Trp His Gln Ala His Phe Gly Glu
92      210          215          220
93      gga tct ggc cca ata ttg ttg gat gaa gta cgc tgc acc gga aac gag      961
94      Gly Ser Gly Pro Ile Leu Leu Asp Glu Val Arg Cys Thr Gly Asn Glu

```

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/147,947A

DATE: 02/01/2000
TIME: 14:05:12

Input Set: I147947A.RAW

95	225	230	235	
96	ctg tca att gag caa tgt cca aag agt tcc tgg ggc gaa cat aac tgt	1009		
97	Leu Ser Ile Glu Gln Cys Pro Lys Ser Ser Trp Gly Glu His Asn Cys			
98	240	245	250	255
99	ggc cat aaa gaa gat gct gga gtg tct tgt gtt cct cta aca gat ggt	1057		
100	Gly His Lys Glu Asp Ala Gly Val Ser Cys Val Pro Leu Thr Asp Gly			
101		260	265	270
102	gtc atc aga ctg gca gga gga aaa agt acc cat gaa ggt cgc ctg gag	1105		
103	Val Ile Arg Leu Ala Gly Gly Lys Ser Thr His Glu Gly Arg Leu Glu			
104		275	280	285
105	gtc tac tac aag ggg cag tgg ggg aca gtc tgt gat gat ggc tgg act	1153		
106	Val Tyr Tyr Lys Gly Gln Trp Gly Thr Val Cys Asp Asp Gly Trp Thr			
107		290	295	300
108	gag atg aac aca tac gtg gct tgt cga ctg ctg gga ttt aaa tac ggc	1201		
109	Glu Met Asn Thr Tyr Val Ala Cys Arg Leu Leu Gly Phe Lys Tyr Gly			
110		305	310	315
111	aaa cag tcc tct gtg aac cat ttt gat ggc agc aac agg ccc ata tgg	1249		
112	Lys Gln Ser Ser Val Asn His Phe Asp Gly Ser Asn Arg Pro Ile Trp			
113		320	325	330
114	ctg gat gac gtc agc tgc tca gga aaa gaa gtc agc ttc att cag tgt	1297		
115	Leu Asp Asp Val Ser Cys Ser Gly Lys Glu Val Ser Phe Ile Gln Cys			
116		340	345	350
117	tcc agg aga cag tgg gga agg cat gac tgc agc cat aga gaa gat gtg	1345		
118	Ser Arg Arg Gln Trp Gly Arg His Asp Cys Ser His Arg Glu Asp Val			
119		355	360	365
120	ggc ctc acc tgc tat cct gac agc gat gga cat agg ctt tct cca ggt	1393		
121	Gly Leu Thr Cys Tyr Pro Asp Ser Asp Gly His Arg Leu Ser Pro Gly			
122		370	375	380
123	ttt ccc atc aga cta gtg gat gga gag aat aag aag gaa gga cga gtg	1441		
124	Phe Pro Ile Arg Leu Val Asp Gly Glu Asn Lys Lys Glu Gly Arg Val			
125		385	390	395
126	gag gtt ttt gtc aat ggc caa tgg gga aca atc tgc gat gac gga tgg	1489		
127	Glu Val Phe Val Asn Gly Gln Trp Gly Thr Ile Cys Asp Asp Gly Trp			
128		400	405	410
129	acc gat aag cat gca gct gtg atc tgc cgg cag ctt ggc tat aag ggt	1537		
130	Thr Asp Lys His Ala Ala Val Ile Cys Arg Gln Leu Gly Tyr Lys Gly			
131		420	425	430
132	cct gcc aga gca agg act atg gct tat ttt ggg gaa gga aaa ggc ccc	1585		
133	Pro Ala Arg Ala Arg Thr Met Ala Tyr Phe Gly Glu Gly Lys Gly Pro			
134		435	440	445
135	atc cac atg gat aat gtg aag tgc aca gga aat gag aag gcc ctg gct	1633		
136	Ile His Met Asp Asn Val Lys Cys Thr Gly Asn Glu Lys Ala Leu Ala			
137		450	455	460
138	gac tgt gtc aaa caa gac att gga agg cac aac tgc cgc cac agt gag	1681		
139	Asp Cys Val Lys Gln Asp Ile Gly Arg His Asn Cys Arg His Ser Glu			
140		465	470	475
141	gat gca gga gtc atc tgt gac tat tta gag aag aaa gca tca agt agt	1729		
142	Asp Ala Gly Val Ile Cys Asp Tyr Leu Glu Lys Lys Ala Ser Ser Ser			
143		480	485	490
144	ggt aat aaa gag atg ctc tca tct gga tgt gga ctg agg tta ctg cac	1777		

PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/147,947A

DATE: 02/01/2000
TIME: 14:05:12

Input Set: I147947A.RAW

145	Gly Asn Lys Glu Met Leu Ser Ser Gly Cys Gly Leu Arg Leu Leu His	
146	500 505 510	
147	cgt cgg cag aaa cgg atc att ggt ggg aac aat tct tta agg ggt gcc	1825
148	Arg Arg Gln Lys Arg Ile Ile Gly Gly Asn Asn Ser Leu Arg Gly Ala	
149	515 520 525	
150	tgg cct tgg cag gct tcc ctc agg ctg agg tcg gcc cat gga gac ggc	1873
151	Trp Pro Trp Gln Ala Ser Leu Arg Leu Arg Ser Ala His Gly Asp Gly	
152	530 535 540	
153	agg ctg ctt tgt gga gct acc ctt ctg agt agc tgc tgg gtc ctg aca	1921
154	Arg Leu Leu Cys Gly Ala Thr Leu Leu Ser Ser Cys Trp Val Leu Thr	
155	545 550 555	
156	gct gca cac tgc ttc aaa agg tac gga aac aac tcg agg agc tat gca	1969
157	Ala Ala His Cys Phe Lys Arg Tyr Gly Asn Asn Ser Arg Ser Tyr Ala	
158	560 565 570 575	
159	gtt cga gtt ggg gat tat cat act ctg gta cca gag gag ttt gaa caa	2017
160	Val Arg Val Gly Asp Tyr His Thr Leu Val Pro Glu Glu Phe Glu Gln	
161	580 585 590	
162	gaa ata ggg gtt caa cag att gtg att cac agg aac tac agg cca gac	2065
163	Glu Ile Gly Val Gln Gln Ile Val Ile His Arg Asn Tyr Arg Pro Asp	
164	595 600 605	
165	aga agc gac tat gac att gcc ctg gtt aga ttg caa gga cca ggg gag	2113
166	Arg Ser Asp Tyr Asp Ile Ala Leu Val Arg Leu Gln Gly Pro Gly Glu	
167	610 615 620	
168	caa tgt gcc aga cta agc acc cac gtt ttg cca gcc tgt tta cct cta	2161
169	Gln Cys Ala Arg Leu Ser Thr His Val Leu Pro Ala Cys Leu Pro Leu	
170	625 630 635	
171	tgg aga gag agg cca cag aaa aca gcc tcc aac tgt cac ata aca gga	2209
172	Trp Arg Glu Arg Pro Gln Lys Thr Ala Ser Asn Cys His Ile Thr Gly	
173	640 645 650 655	
174	tgg gga gac aca ggt cgt gcc tac tca aga act cta caa caa gct gct	2257
175	Trp Gly Asp Thr Gly Arg Ala Tyr Ser Arg Thr Leu Gln Gln Ala Ala	
176	660 665 670	
177	gtg cct ctg tta ccc aag agg ttt tgt aaa gag agg tac aag gga cta	2305
178	Val Pro Leu Leu Pro Lys Arg Phe Cys Lys Glu Arg Tyr Lys Gly Leu	
179	675 680 685	
180	ttt act ggg aga atg ctc tgt gct ggg aac ctc caa gaa gac aac cgt	2353
181	Phe Thr Gly Arg Met Leu Cys Ala Gly Asn Leu Gln Glu Asp Asn Arg	
182	690 695 700	
183	gtg gac agc tgc cag gga gac agt gga gga cca ctc atg tgt gaa aag	2401
184	Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Met Cys Glu Lys	
185	705 710 715	
186	cct gat gag tcc tgg gtt gtg tat ggg gtg act tcc tgg ggg tat gga	2449
187	Pro Asp Glu Ser Trp Val Val Tyr Gly Val Thr Ser Trp Gly Tyr Gly	
188	720 725 730 735	
189	tgt gga gtc aaa gac act cct gga gtt tat acc aga gtc ccc gcc ttt	2497
190	Cys Gly Val Lys Asp Thr Pro Gly Val Tyr Thr Arg Val Pro Ala Phe	
191	740 745 750	
192	gta cct tgg ata aaa agt gtc acc agt ctg taacttatgg aaagctcaag	2547
193	Val Pro Trp Ile Lys Ser Val Thr Ser Leu	
194	755 760	

PAGE: 5

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/147,947A

DATE: 02/01/2000
TIME: 14:05:12

Input Set: I147947A.RAW

```

195      aaaatagtaa aacagtaacc attcagtctt catacttggc accatgccag aaaaaaaaaa 2607
196      aaaaaaaa 2614
197 <210> SEQ ID NO 4
198 <211> LENGTH: 761
199 <212> TYPE: PRT
200 <213> ORGANISM: Mouse
201 <220> FEATURE:
202 <223> OTHER INFORMATION:
203 <400> SEQUENCE: 4
204      Met Ala Leu Ala Arg Cys Val Leu Ala Val Ile Leu Gly Ala Leu Ser
205           1           5           10           15
206      Val Val Ala Arg Ala Asp Pro Val Ser Arg Ser Pro Leu His Arg Pro
207           20           25           30
208      His Pro Ser Pro Pro Arg Ser Gln His Ala His Tyr Leu Pro Ser Ser
209           35           40           45
210      Arg Arg Pro Pro Arg Thr Pro Arg Phe Pro Leu Pro Leu Arg Ile Pro
211           50           55           60
212      Ala Ala Gln Arg Pro Gln Val Leu Ser Thr Gly His Thr Pro Pro Thr
213           65           70           75           80
214      Ile Pro Arg Arg Cys Gly Ala Gly Glu Ser Trp Gly Asn Ala Thr Asn
215           85           90           95
216      Leu Gly Val Pro Cys Leu His Trp Asp Glu Val Pro Pro Phe Leu Glu
217           100          105          110
218      Arg Ser Pro Pro Ala Ser Trp Ala Glu Leu Arg Gly Gln Pro His Asn
219           115          120          125
220      Phe Cys Arg Ser Pro Asp Gly Ser Gly Arg Pro Trp Cys Phe Tyr Arg
221           130          135          140
222      Asn Ala Gln Gly Lys Val Asp Trp Gly Tyr Cys Asp Cys Gly Gln Gly
223           145          150          155          160
224      Pro Ala Leu Pro Val Ile Arg Leu Val Gly Gly Asn Ser Gly His Glu
225           165          170          175
226      Gly Arg Val Glu Leu Tyr His Ala Gly Gln Trp Gly Thr Ile Cys Asp
227           180          185          190
228      Asp Gln Trp Asp Asn Ala Asp Ala Asp Val Ile Cys Arg Gln Leu Gly
229           195          200          205
230      Leu Ser Gly Ile Ala Lys Ala Trp His Gln Ala His Phe Gly Glu Gly
231           210          215          220
232      Ser Gly Pro Ile Leu Leu Asp Glu Val Arg Cys Thr Gly Asn Glu Leu
233           225          230          235          240
234      Ser Ile Glu Gln Cys Pro Lys Ser Ser Trp Gly Glu His Asn Cys Gly
235           245          250          255
236      His Lys Glu Asp Ala Gly Val Ser Cys Val Pro Leu Thr Asp Gly Val
237           260          265          270
238      Ile Arg Leu Ala Gly Gly Lys Ser Thr His Glu Gly Arg Leu Glu Val
239           275          280          285
240      Tyr Tyr Lys Gly Gln Trp Gly Thr Val Cys Asp Asp Gly Trp Thr Glu
241           290          295          300
242      Met Asn Thr Tyr Val Ala Cys Arg Leu Leu Gly Phe Lys Tyr Gly Lys
243           305          310          315          320
244      Gln Ser Ser Val Asn His Phe Asp Gly Ser Asn Arg Pro Ile Trp Leu

```

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/147,947A

DATE: 02/01/2000
TIME: 14:05:12

Input Set: **I147947A.RAW**

Line ? Error/Warning

Original Text

26 W "N" or "Xaa" used: Feature required

gtgctcacng cngcbcaytg

39 W "N" or "Xaa" used: Feature required

agcggnccnc cdgartcvcc